of this implementation of the invention magnetic resonance signals between several pairs of refocusing pulses are used as reference magnetic resonance signals. On the basis of differences between position magnetic resonance signals of the microcoil, acquired between successive pairs of refocusing pulses, it is also possible to detect motion in or of the patient to be examined. On the basis of the differences between position magnetic resonance signals to both sides of a refocusing pulse, subsequently the phase-encoding gradients applied after a next refocusing pulse are adapted so as to correct for the detected motion.

Furthermore, in the GRASE sequence shown in Fig. 2 it is also possible to derive the temperature variation from phase differences between gradient echoes (RF12, RF22, ...) which always occur halfway between successive refocusing pulses. The distance in time between successive refocusing pulses is adjusted so that the phase crosses zero halfway between the successive refocusing pulses. A temperature variation causes an additional phase contribution which is approximately proportional to the temperature dependent chemical shift. This phase contribution is exactly the difference between the phases of successive gradient echoes, each time halfway between refocusing pulses.

CLAIMS:

1. A method of forming a magnetic resonance image wherein
- magnetic resonance signals are acquired,
- the position of a measuring site is determined, and
- the magnetic resonance image is reconstructed from the magnetic resonance signals and on the basis of the position of the measuring site.

2. A method of forming a magnetic resonance image as claimed in Claim 1 wherein
- a detail and an indication of the measuring site are reproduced, and
- the position of the detail in the magnetic resonance image is corrected on the basis of the position of the indication of the measuring site in the magnetic resonance image.

3. A method of forming a magnetic resonance image as claimed in Claim 1 wherein
- a set of measuring magnetic resonance signals is acquired at a reference temperature,
- a set of measuring magnetic resonance signals is acquired after the temperature has been changed, notably increased, at the area of the measuring site,
- a reference magnetic resonance image is derived from the reference magnetic resonance signals,
- a measuring magnetic resonance image is derived from the measuring magnetic resonance signals, and
- the measuring magnetic resonance image and the reference magnetic resonance image are made to register on the basis of the position determined for the measuring site.

4. A method of forming a magnetic resonance image as claimed in Claim 3 wherein
- on the basis of the position determined for the measuring site the reference magnetic resonance signals and the measuring magnetic resonance signals are acquired from essentially the same region.

5. A method of forming a magnetic resonance image as claimed in Claim 3 wherein

- a detail and an indication of the measuring site are reproduced in the reference magnetic resonance image,
- the same detail and the indication of the measuring site are reproduced in the measuring magnetic resonance image, and wherein
- a shift of the detail is derived from respective positions of the detail relative to the indication of the measuring site in the reference magnetic resonance image and the measuring magnetic resonance image,
- the position of the detail in the measuring magnetic resonance image is corrected on the basis of the derived shift of the detail.

6. A method of forming a magnetic resonance image wherein

- magnetic resonance signals are acquired,
- the position of a measuring site is measured, and
- the temperature at the measuring site is derived from the magnetic resonance signals.

7. A method of forming a magnetic resonance image as claimed in Claim 6 wherein

- a set of reference magnetic resonance signals is acquired at a reference temperature,
- the temperature at the area of the measuring site is changed relative to the reference temperature, the temperature notably being increased at the area of the measuring site,
- a set of measuring magnetic resonance signals is subsequently acquired, and
- a temperature distribution is derived from the reference magnetic resonance signals, the position of the measuring site and the measuring magnetic resonance signals.

8. A method of forming a magnetic resonance image as claimed in Claim 7 wherein

- a thermal image is derived from the measuring magnetic resonance signals, the reference magnetic resonance signals and the position of the measuring site, said thermal image reproducing the temperature distribution.

9. A method as claimed in Claim 1 or 6 wherein